A Benchmark in Neonatal Intensive Care

Milan’s Mangiagalli Clinic Operative Unit equipped with Philips monitors

Who/where
The Neonatal Operative Unit and the Neonatal Intensive Care Unit at the Mangiagalli Clinic in Milan, Italy, Fondazione IRCCS Cà Granda Ospedale Maggiore Policlinico.

Summary:
Professor Fabio Mosca, Director of Neonatology and Neonatal Intensive Care at the Mangiagalli Clinic in Milan, is an authority on Neonatology in Italy and throughout the world. We interviewed him to bring you news of the installation of Philips monitoring equipment in his Operative Unit.

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Challenge
It was crucial that such a large neonatal intensive care unit was equipped with one of the industry’s leading vital signs monitoring systems available today, integrating them with the equipment already in the unit.

Solution
Philips supplied IntelliVue solutions, including: 33 MX800 Monitors, 12 with dual screens and 11 standard; 43 X2 Multi-Measurement Modules; 1 M3150; 10 MP50s; 1 Patient Link.
Abstract:
Professor Mosca runs the only paperless neonatal unit in Italy. Everything is communicated through bytes. The entire care and treatment process, in fact, is managed via a sophisticated electronic clinical record, that follows every little patient from arrival to discharge. In this context, the vital signs monitoring systems supplied by Philips take on significant importance. They are designed to be reliable and precise, easy for doctors and nurses to use, and work with existing hospital systems and workflows.

The Operative Unit managed by Professor Fabio Mosca looks after newborns in a critical condition and is the largest neonatal treatment unit in Italy, with 23 cots in intensive care and 33 cots in intermediate care. Of the estimated 900 newborns each year, more than one third require ventilatory support. “In my opinion, a modern department needs a balance of the best that technology can offer and a focus on humanizing care,” explains Professor Mosca, who discusses the specific needs of his Operative Unit and his vision of how neonatology will evolve in the next few years.

Yours is a very special department. How is the family involved in the care of each baby?
We like the parents to help care for their babies. Our doors are open 24 hours a day and the moms and dads are there as much as possible. From the beginning, we try to recreate the parent/child bond that’s interrupted at the moment of a preterm birth. We progressively encourage involvement in a series of essential activities, for example, skin-to-skin contact, kangaroo care, nursing, aspects relating to hygiene, and administering treatments.

What are the main benefits for the parents and babies?
To help our moms and dads, we’ve created a special program called “Self Care.” The parents take responsibility early on for their baby and in this way they don’t experience preterm birth with feelings of guilt or defeat. Day by day, they learn the skills they need to be able to go home sooner, and to do so in the best conditions.
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**Why did you decide to use Philips, and what are the features you appreciate most?**
Philips is one of the market leaders and I chose it after careful consideration of other monitoring systems. Different factors were involved in my evaluation: the company’s professionalism, its considerable background in the field of monitoring, and in particular, neonatal monitoring; the fact that the modular system can be implemented and interfaced with the one already in use in the department; and the pleasing aesthetics.

**How has the workflow changed in your department?**
The system has a monitoring center that enables physicians to look after 23 cots from one room. This has improved logistics, which means we have optimized space.

**Please tell us about your vision of neonatal care in the future.**
From my point of view, neonatal care departments need to change completely, moving from an open-planned layout to single rooms. This is how I’m designing the new department at our hospital, which will be constructed in a special building adjacent to the Mangiagalli Clinic. The new layout will allow us to pay greater attention to important environmental factors, such as light and noise, and ultimately to improve the humanizing aspects of the care we provide, with the family having a greater presence. In short, this layout will help us unite technology and humanization more effectively.

**What are the critical factors and challenges that you still face?**
Greater care and more accurate monitoring are required for resuscitation on the labor ward. Another critical area for improvement is the prevention of infection. Then, I would say that two areas that need to be tackled (and that we are tackling) are management of clinical risk and the prevention of therapeutic error. I also think that, in the future, the preparation of treatments will be automated using a robot.

**Any final comments?**
The help we receive from private associations will be highly important. Today we avail ourselves already of the very precious support of AISTMAR (Associazione Italiana per lo Studio e la Tutela della Maternità ad Alte Rischi - Italian association for study and training in high-risk maternity) and ASGENAR (Associazione Genitori Neonati Alti Rischio - Association of parents of high-risk newborns). That said, I maintain that the future of neonatology will lie in the better organization of multi-disciplinary follow-up that follows babies from afar, to help our families achieve a better quality of life.

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